AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (withdrawn) An infrared imaging device, comprising:

an infrared detector;

an optical system for causing an infrared radiation from an object to form an image on the infrared detector;

shutting means configured so that the shutting means can be opened/closed and so as to shut off an infrared radiation coming into the optical system when the shutting means is closed; and

correction means for correcting an output of the infrared detector,

wherein the correction means determines a second correction coefficient for correcting variations in a DC offset among pixels and fluctuations in an amount of infrared radiation from the optical system by using an output of the infrared detector imaging the shutting means while the shutting means is closed and a first correction coefficient proportional to a sensitivity of each pixel of the infrared detector and shading.

2. (cancelled)

3. (withdrawn) The infrared imaging device of claim 1, wherein:

the infrared imaging device comprises second shutting means configured so that the second shutting means can be opened/closed and so as to shut off an infrared radiation coming into the optical system when the second shutting means is closed; and

the correction means determines the first correction coefficient by using the output of the infrared detector imaging the shutting means being closed and an output of the infrared detector imaging the second shutting means being closed.

4. (withdrawn) The infrared imaging device of claim 1, wherein:

the infrared imaging device comprises temperature setting means for setting a temperature of the shutting means; and

the correction means determines the first correction coefficient by using an output of the infrared detector imaging the shutting means being closed, which has been set to a first temperature by the temperature setting means, and an output of the infrared detector imaging the shutting means being closed, which has been set to a second temperature by the temperature setting means.

5. (withdrawn) The infrared imaging device of claim 1, wherein:

the infrared imaging device comprises temperature measurement means for measuring a surface temperature of the shutting means; and

the correction means determines the correction coefficient by using a temperature measured by the temperature measurement means.

6. (withdrawn) The infrared imaging device of claim 1, wherein the optical system is set to a non-focused state while the shutting means is closed.

7. (withdrawn) The infrared imaging device of claim 1, wherein the shutting means is a flat-plate member having a uniform temperature distribution.

8. (withdrawn) The infrared imaging device of claim 1, wherein:

the infrared imaging device comprises temperature setting means for setting a temperature of the shutting means; and

the temperature setting means sets the temperature of the shutting means to a temperature in a vicinity of a temperature of a particular object to be imaged while the shutting means is closed.

9. (withdrawn) An infrared imaging device to be installed in a moving object, the infrared imaging device comprising:

an infrared detector;

correction means for correcting an output of the infrared detector; and

control means for controlling a timing at which the correction means determines a correction coefficient based on a signal sent from at least one of the following means provided in the moving object: means for detecting a speed of the moving object; means for identifying a traffic signal of a traffic light located in a traveling direction of the moving object; and means for determining presence/absence of an object to be detected in the traveling direction of the moving object.

10. (withdrawn) A vehicle having the infrared imaging device of claim 9, the vehicle comprising means for detecting a speed of the vehicle,

wherein the control means provided in the infrared imaging device receives an output signal of the speed detection means to control the timing at which to determine the correction coefficient.

11. (withdrawn) A vehicle having the infrared imaging device of claim 9, the vehicle comprising means for identifying a traffic signal of a traffic light located in a traveling direction of the vehicle,

wherein the control means provided in the infrared imaging device receives an output signal of the traffic light identification means to control the timing at which to determine the correction coefficient.

12. (withdrawn) A vehicle having the infrared imaging device of claim 9, the vehicle comprising means for determining presence/absence of an object to be detected in a traveling direction of the vehicle,

wherein the control means provided in the infrared imaging device receives an output signal of the object determination means to control the timing at which to determine the correction coefficient.

13. (currently amended) An infrared imaging device to be installed in a vehicle, the infrared imaging device comprising:

an infrared detector;

an optical system for causing an infrared radiation from an object to form an image on the infrared detector; and

a temperature retaining structure for stabilizing a temperature in a vicinity of the infrared detector and the optical system by using a mechanism in the vehicle

wherein the temperature retaining structure circulates an engine coolant of the vehicle in the vicinity of the infrared detector and the optical system.

14. (cancelled)

15. (currently amended) A vehicle, comprising:

an infrared imaging device; and

a temperature retaining structure for stabilizing a temperature in a vicinity of the infrared imaging device by using a mechanism in the vehicle

wherein the temperature retaining structure circulates an engine coolant of the vehicle in the vicinity of the infrared imaging device.

16. (cancelled)

17. (withdrawn) An infrared imaging device to be installed in a vehicle, the infrared imaging device comprising a mechanism for setting/changing a imaging direction of the infrared imaging device,

wherein the mechanism sets the imaging direction toward outside of the vehicle during a normal operation, and sets the imaging direction toward a part of the vehicle, which is to be a temperature reference, during a calibration operation.

18. (withdrawn) A vehicle, comprising:

an infrared imaging device; and

a mechanism for setting/changing a imaging direction of the infrared imaging device,

wherein the mechanism sets the imaging direction toward outside of the vehicle during a normal operation, and sets the imaging direction toward a part of the vehicle, which is to be a temperature reference, during a calibration operation.

19-21. (cancelled)